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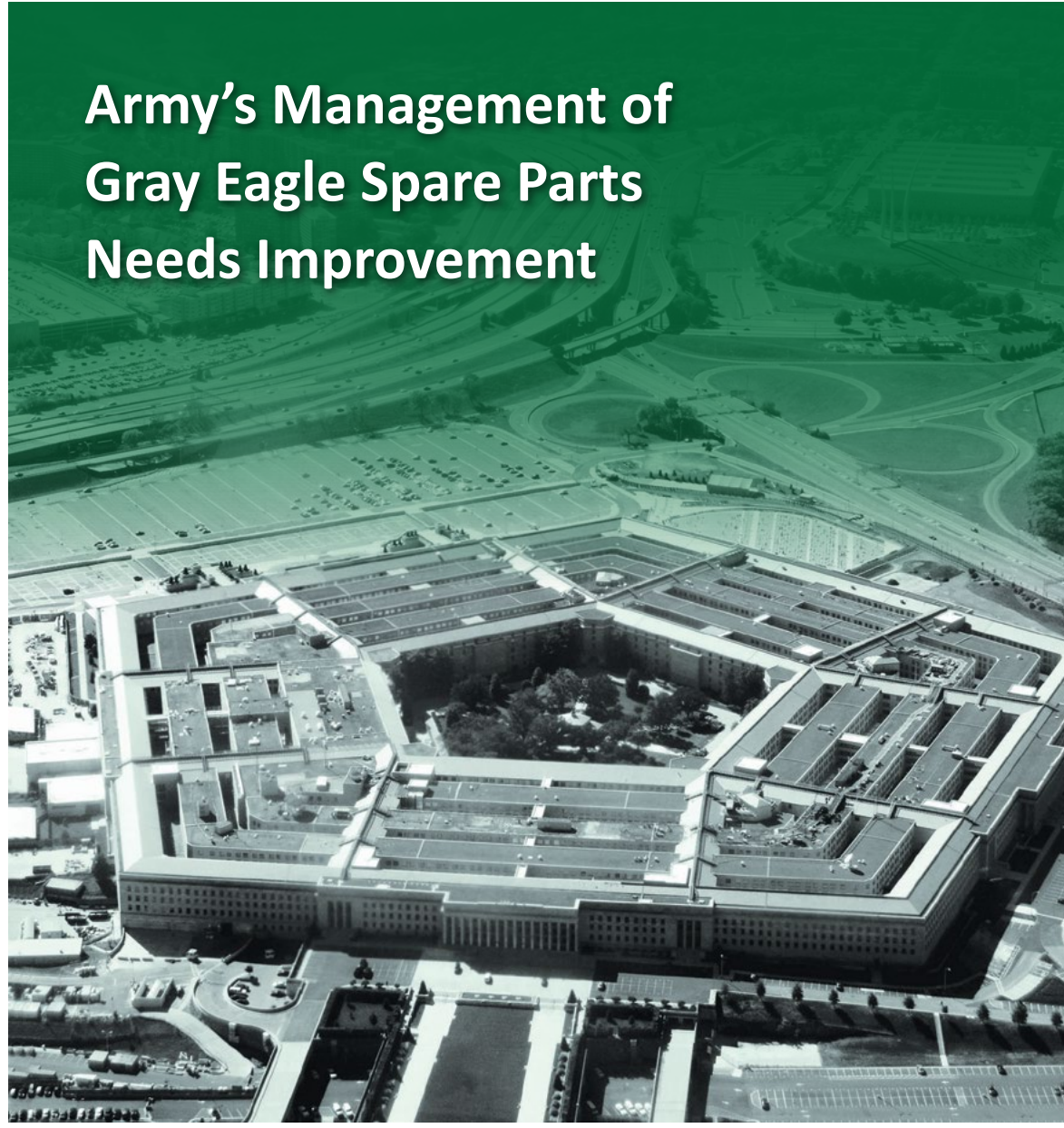
INSPECTOR GENERAL

U.S. Department of Defense

APRIL 29, 2016



Army's Management of Gray Eagle Spare Parts Needs Improvement



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Results in Brief

Army's Management of Gray Eagle Spare Parts Needs Improvement

April 29, 2016

Objective

The objective of the audit was to determine whether the Department of the Army (Army) effectively managed MQ-1C Gray Eagle (Gray Eagle) spare parts. Specifically, we determined whether the Army effectively managed its spare-parts inventory and purchased spare parts at fair and reasonable prices.

Findings

(FOUO) Product Manager–Medium Altitude Endurance (PdM MAE) officials did not effectively manage Gray Eagle spare parts inventory. Specifically, PdM MAE officials did not report [REDACTED] spare parts, valued at \$[REDACTED] million, on the annual Army financial statements; owned [REDACTED] spare parts, valued at \$[REDACTED] million, in available inventory that included excess and obsolete spare parts; and did not use Defense Logistics Agency (DLA) inventory prior to procuring spare parts from General Atomics. This occurred because PdM MAE officials retained obsolete spare parts for potential future use and did not:

- include the spare parts in an Army Accountable Property System of Record (APSR);
- verify that General Atomics considered inventory located at DoD-fielded locations when forecasting and purchasing spare parts;
- dispose of spare parts that were not used in the last two years; and
- require the use of existing DLA inventory prior to purchasing the spare parts through General Atomics.

Findings (cont'd)

(FOUO) As a result, PdM MAE officials undervalued inventory on the Army financial statements by more than \$[REDACTED] million; kept \$[REDACTED] million in obsolete spare parts; retained excess inventory, valued at \$[REDACTED] million; may pay \$[REDACTED] in additional monthly storage costs to maintain obsolete and excess spare parts and could save a total of \$[REDACTED] million in storage costs over the next five years; and may pay an additional \$[REDACTED] on future spare parts purchased from General Atomics rather than maximizing DLA inventory.

(FOUO) Also, contracting officers and Army officials did not:

- receive fair and reasonable prices for 31 of 37 non-statistically sampled spare parts, valued at \$[REDACTED] million, on the full rate production (full production) contract; and
- validate actual unit costs for [REDACTED] spare parts, valued at \$[REDACTED] million, purchased on the performance-based logistics (PBL) contract.

(FOUO) This occurred because the contracting officers did not conduct an adequate cost or price analysis on spare parts. Additionally, contracting and PdM MAE officials did not obtain actual unit costs paid for spare parts. As a result, Army officials potentially paid \$[REDACTED] million in excess of fair and reasonable prices on the full production contract and will potentially overpay \$[REDACTED] million on future spare parts purchased. In addition, contracting officers cannot transition the PBL contract to a fixed price contract because it did not obtain actual unit costs paid for spare parts.

Recommendations

We recommend that the Project Manager, Unmanned Aircraft System, include the spare parts in an APSR and require PdM MAE to: conduct studies and initiate disposal of unneeded excess and obsolete spare parts; use current excess inventory before purchasing spare parts; review the contract terms and determine if the contract should be modified to include a requirement for General Atomics to include inventory



Results in Brief

Army's Management of Gray Eagle Spare Parts Needs Improvement

Recommendations (cont'd)

located at DoD-fielded locations when forecasting spare parts for the PBL contract; and verify the Army's actual cost in the Catalog, Order and Logistics Tracking System.

We recommend the Executive Director, Army Contracting Command, Redstone Arsenal (ACC-RSA), verify that the contracting officers conduct an adequate fair and reasonable price analysis for the full production contract; request actual spare-part unit costs; assess and determine whether overpayments were made and seek recovery of overpayments; and develop a plan to transition to a fixed price contract.

Management Comments and Our Response

Comments from the U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responding for the Project Manager, Unmanned Aircraft System, and comments from the Deputy Chief of Staff, Army Materiel Command responding for the Executive Director, ACC-RSA, addressed all specifics of the recommendations, and no additional comments are required. Please see the Recommendations Table on the next page.

Recommendations Table

Management	Recommendations Requiring Comment	No Additional Comments Required
Project Manager, Unmanned Aircraft System		A.1.a, A.1.b.i, A.1.b.ii, A.1.b.iii, A.1.b.iv, and B.2
Executive Director, Army Contracting Command, Redstone Arsenal		B.1.a, B.1.b, B.1.c, and B.1.d





**INSPECTOR GENERAL
DEPARTMENT OF DEFENSE
4800 MARK CENTER DRIVE
ALEXANDRIA, VIRGINIA 22350-1500**

April 29, 2016

MEMORANDUM FOR AUDITOR GENERAL, DEPARTMENT OF THE ARMY

SUBJECT: Army's Management of Gray Eagle Spare Parts Needs Improvement
(Report No. DODIG-2016-080)

~~(FOUO)~~ We are providing this report for your information and use. Product Manager-Medium Altitude Endurance (PdM MAE) officials did not effectively manage spare parts inventory. Specifically, PdM MAE officials undervalued inventory on the annual Army financial statements by more than \$[REDACTED] million, kept \$[REDACTED] million in obsolete spare parts, and retained excess inventory valued at \$[REDACTED] million. Additionally, Army officials potentially paid \$[REDACTED] million in excess of fair and reasonable prices on the full production contract and will potentially overpay \$[REDACTED] million on future spare parts purchased. We conducted this audit in accordance with generally accepted government auditing standards.

We considered management comments on a draft of this report when preparing the final report. Comments from the U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responding for the Project Manager, Unmanned Aircraft System, and comments from the Deputy Chief of Staff, Army Materiel Command, responding for the Executive Director, Army Contracting Command, Redstone Arsenal, conformed to the requirements of DoD Instruction 7650.03; therefore, we do not require additional comments.

We appreciate the courtesies extended to the staff. Please direct questions to me at (703) 604-9077 (DSN 664-9077).

Jacqueline L. Wicecarver
Jacqueline L. Wicecarver
Acting Deputy Inspector General
For Auditing

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Acronyms and Abbreviations

Introduction

Objective

The audit objective was to determine whether the Department of the Army (Army) effectively managed the MQ-1C Gray Eagle (Gray Eagle) spare parts. Specifically, we determined whether the Army effectively managed spare-parts inventory and purchased spare parts at fair and reasonable prices. See Appendixes A and B for a discussion of the scope and methodology and prior audit coverage related to the objective.

Background

The U.S. Army Program Executive Office, Aviation, provides oversight to the Project Manager, Unmanned Aircraft System (PM UAS). PM UAS oversees Product Manager–Medium Altitude Endurance (PdM MAE), which is responsible for the oversight of the Gray Eagle. The Gray Eagle is an extended range/multipurpose UAS that provides reconnaissance, surveillance, and target acquisition; command and control; electronic warfare; and attack capabilities.

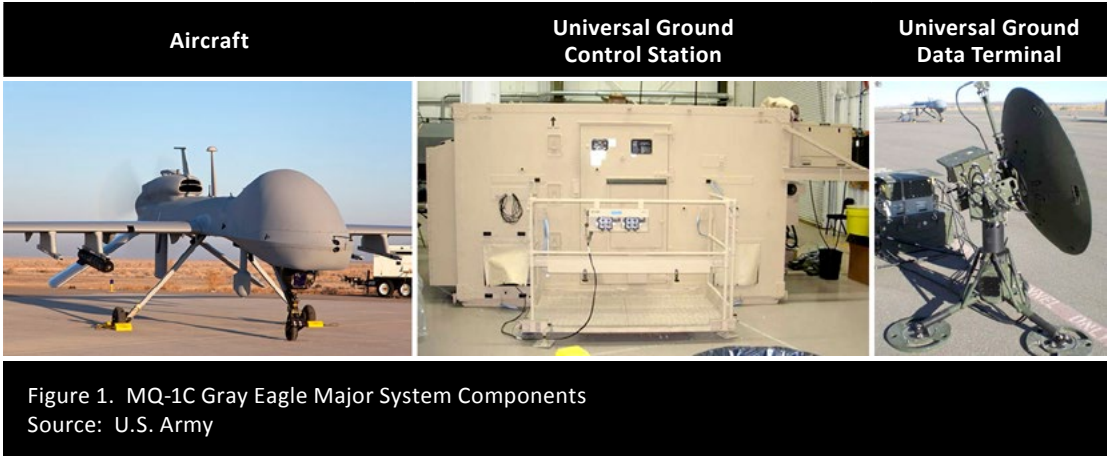
An Army company of 128 Soldiers operates and maintains each Gray Eagle unit. A Gray Eagle unit consists of:

- nine unmanned aircraft,
- five ground control stations,
- six ground data terminals,
- one mobile ground control station,
- three satellite ground data terminals,
- an automated take-off and landing system, and
- other ground-support equipment.¹

~~(FOUO)~~ According to a PdM MAE official, there were eight fielded Gray Eagle units located within the contiguous United States, and four deployed sites outside the contiguous United States. PdM MAE plans to field an additional eight units before the end of FY 2018. [REDACTED]

[REDACTED] See Figure 1 for pictures of the Gray Eagle aircraft, universal ground control station, and the universal ground data terminal.

¹ According to a PdM MAE official, this is a normal Gray Eagle unit located in the contiguous United States.



Gray Eagle Contracts With General Atomics

~~(FOUO)~~ The Gray Eagle is manufactured by General Atomics Aeronautical Systems, Inc. (General Atomics) for the Army. General Atomics produces long-endurance, mission-capable aircraft with the integrated sensor and data link systems required to deliver persistent situational awareness and rapid strike capabilities. The Army Contracting Command, Redstone Arsenal (ACC-RSA), provides contracting support to Army program executive offices and program managers, and awarded five ongoing Gray Eagle contracts to General Atomics from May 2010 through September 2013. The contracts included three initial production contracts, one full rate production (full production) contract, and one performance-based logistics (PBL) contract. In total, ACC-RSA purchased [REDACTED] spare parts, valued at \$[REDACTED] million. See Table 2 for a break-out of the spare parts on each Gray Eagle contract.

Table 2. ~~(FOUO)~~ Spare Parts on Gray Eagle Contracts

Contract Date	Contract Type	Initial/Full Production	(FOUO) Number of Spare Parts	(FOUO) Parts Value (in millions)
May 14, 2010	Fixed Price Incentive	Initial Production I	[REDACTED]	[REDACTED]
April 8, 2011	Fixed Price Incentive	Initial Production II	[REDACTED]	[REDACTED]
July 6, 2012	Fixed Price Incentive	Initial Production III	[REDACTED]	[REDACTED]
May 8, 2012	Cost-Plus-Fixed-Fee PBL	Logistics Support and Fleet Sustainment Operations	[REDACTED]	[REDACTED]
September 13, 2013	Firm-Fixed Price	Full Production – Initial Spare Parts	[REDACTED]	[REDACTED]
Total			[REDACTED]	[REDACTED]

ACC-RSA requested the Defense Contract Audit Agency (DCAA) provide field pricing assistance to verify General Atomics' costs. DCAA provides audit and financial advisory services to DoD and other federal entities responsible for acquisition and contract administration. In addition, ACC-RSA designated contract administration to the Defense Contract Management Agency (DCMA). DCMA works directly with defense suppliers to ensure that DoD supplies and services meet all performance requirements and are delivered on time and at projected cost. As part of its administrative role for the Gray Eagle program, DCMA performed functional surveillance in quality, engineering, contracts, flight operations, and safety functions.

Inventory of Gray Eagle Spare Parts

~~(FOUO)~~ PdM MAE requires General Atomics to maintain the Gray Eagle spare parts inventory within the Army's Catalog, Order and Logistics Tracking System (COLTS). COLTS includes the Gray Eagle spare parts inventory located at a General Atomics-maintained warehouse in Poway, California, and all DoD-fielded locations. PdM MAE provided COLTS data that included an inventory of [REDACTED] spare parts, valued at \$[REDACTED] million.

~~(FOUO)~~ PdM MAE coordinated with the Defense Logistics Agency (DLA) to assign National Stock Numbers (NSN)² to the Gray Eagle spare parts. DLA is DoD's logistics combat support agency. DLA provides the Military Services more than 90 percent of the spare parts. According to a PdM MAE official, as of June 16, 2015, DLA assigned NSNs to [REDACTED] spare parts for Gray Eagle.

Review of Internal Controls

DoD Instruction 5010.40, "Managers' Internal Control Program Procedures," May 30, 2013, requires DoD organizations to implement a comprehensive system of internal controls that provides reasonable assurance that programs are operating as intended and to evaluate the effectiveness of the controls. We identified internal control weaknesses within the Army's management of Gray Eagle spare parts. Specifically, according to Army officials, it did not include the spare parts in an Army Accountable Property System of Record (APSR). Army officials also retained obsolete spare parts for potential future use; did not verify that General Atomics considered inventory located at DoD-fielded locations when forecasting spare parts on the PBL contract; did not verify that General Atomics considered current

² An NSN is an official label applied to an item of supply that is repeatedly procured, stocked, stored, issued, and used throughout the Federal supply system.

excess inventory located at DoD-fielded locations when purchasing spare parts for the production contracts; and did not dispose of spare parts that were not used in the last two years. Additionally, PdM MAE did not require the use of existing DLA inventory prior to purchasing the spare parts through General Atomics. ACC-RSA did not conduct an adequate cost or price analysis on spare parts purchased for the full production contract. Contracting and PdM MAE officials also did not obtain actual spare-part unit costs paid on the PBL contract. We will provide a copy of the report to the senior official responsible for internal controls.

Finding A

Product Manager–Medium Altitude Endurance Did Not Effectively Manage Gray Eagle Spare Parts Inventory

PdM MAE officials did not effectively manage spare parts inventory. Specifically, PdM MAE officials:

- (FOUO) did not report [REDACTED] spare parts, valued at \$ [REDACTED] million, on the annual Army financial statements. Army officials stated that this occurred, because the Army did not include the spare parts in an Army APSR.
- (FOUO) owned [REDACTED] spare parts, valued at \$ [REDACTED] million, in available³ inventory that included obsolete⁴ and excess⁵ spare parts. This occurred because PdM MAE officials:
 - retained obsolete spare parts for potential future use;
 - did not verify that General Atomics considered inventory located at DoD-fielded locations when forecasting spare parts on the PBL contract;
 - did not verify that General Atomics considered current excess inventory located at DoD-fielded locations when purchasing spare parts for the production contracts; and
 - did not dispose of spare parts that were not used in the last two years.
- did not use DLA inventory prior to procuring spare parts from General Atomics. This occurred because PdM MAE officials did not require the use of existing DLA inventory prior to purchasing the spare parts through General Atomics.

As a result, PdM MAE officials:

- (FOUO) undervalued inventory on the annual Army financial statements by more than \$ [REDACTED] million;
- (FOUO) kept \$ [REDACTED] million in obsolete spare parts;
- (FOUO) retained excess inventory, valued at \$ [REDACTED] million;

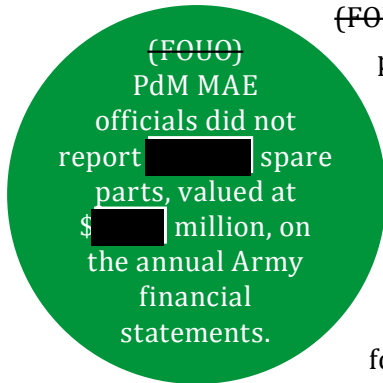
³ Available inventory includes spare parts in serviceable condition that are available for the Army to use to sustain the Gray Eagle units.

⁴ Obsolete inventory are spare parts that are no longer needed or used due to changes in technology.

⁵ Excess inventory are spare parts maintained above what is required to sustain the Gray Eagle through 2018, taking into consideration spare parts retained for economic and contingency purposes.

- (FOUO) may pay \$[REDACTED] in additional monthly storage costs to maintain obsolete and excess spare parts at the Poway warehouse, totaling \$[REDACTED] million over the next five years; and
- (FOUO) may pay an additional \$[REDACTED] on future spare parts purchased from General Atomics rather than maximizing the use of DLA inventory.

Spare Parts Inventory Not Reported on Army Financial Statements



(FOUO) PdM MAE officials did not report [REDACTED] spare parts, valued at \$[REDACTED] million, on the annual Army financial statements. Accounting standards⁶ require that equipment must be recognized on accounting records once title to the equipment passes to the Government. Federal guidance⁷ states that title to supplies shall pass to the Government upon formal acceptance. As the contract administrator, DCMA formally accepted the Gray Eagle spare parts at the General Atomics Poway warehouse.

Spare Parts Not Included in Army Accountable Property System of Record

Army officials stated that it did not include the spare parts in an APSR. The Military Departments are required to ensure they have all Government-accountable property within an APSR no later than the end of FY 2017 to enable accurate financial statement reporting. Gray Eagle spare parts are recorded and tracked in COLTS. However, COLTS does not interface with an APSR. According to an official in the Army budget office, Army spare parts are reported on the financial statements through the Logistics Modernization Program (LMP) system, an Army APSR. PM UAS scheduled testing of an interface between COLTS and LMP from November 2015 through March 2016. According to a PM UAS official, the Gray Eagle spare parts will not be reported on the Army financial statements until COLTS is interfaced with LMP. PM UAS officials should complete the actions necessary to include the Gray Eagle spare parts in an Army APSR.

⁶ Statement of Federal Financial Accounting Standards No. 6, "Accounting for Property, Plant, and Equipment," June 1996.

⁷ Federal Acquisition Regulation 46.505, "Transfer of Title and Risk of Loss," June 14, 2007.

Problems Existed With the Gray Eagle Spare Parts Available Inventory

(FOUO) PdM MAE owned [REDACTED] of [REDACTED] spare parts, valued at \$ [REDACTED] million, in available inventory that included obsolete and excess spare parts. PdM MAE will use [REDACTED] spare parts, valued at \$ [REDACTED] million, to sustain the Gray Eagle through 2018. Of the remaining available inventory, PdM MAE owned [REDACTED] obsolete spare parts, valued at \$ [REDACTED] million, and [REDACTED] excess spare parts, valued at \$ [REDACTED] million. Table 3 illustrates that 72 percent of the available spare parts are not required to sustain the Gray Eagle through 2018.

Table 3. (FOUO) Available Spare Parts Inventory

Category	(FOUO) Total Parts	Quantity Percentage	(FOUO) Total Value (in millions)	Total Value Percentage
Required	[REDACTED]	28%	[REDACTED]	70%
Obsolete	[REDACTED]	2%	[REDACTED]	11%
Excess	[REDACTED]	70%	[REDACTED]	19%
Total	[REDACTED]	100%	[REDACTED]	100%

Obsolete Spare Parts Not Required for Sustainment

(FOUO) PdM MAE owned [REDACTED] obsolete spare parts, valued at \$ [REDACTED] million, which were not required to sustain the Gray Eagle. PdM MAE and General Atomics provided lists of the spare parts used to manufacture all versions of the Gray Eagle and usage data for each of the spare parts. The spare parts identified as obsolete were not included on the manufacturing lists. Additionally, the Army did not use [REDACTED] obsolete spare parts in the past 2 years. The remaining [REDACTED] obsolete spare parts had usage in the past 2 years but are not needed to support the Gray Eagle. A General Atomics official confirmed that the spare parts were obsolete. For example, the Gray Eagle spare parts inventory included [REDACTED] Satellite Simulators, valued at \$ [REDACTED], which were not included on the manufacturing lists provided by PdM MAE and General Atomics, and were not used in the past 2 years. See Figure 4 for a picture of the Satellite Simulator.

(FOUO)
PdM MAE
owned [REDACTED]
obsolete spare
parts, valued at
\$ [REDACTED] million.



Obsolete Spare Parts Retained

PdM MAE retained obsolete spare parts for potential future use. The PBL contract required that General Atomics manage the obsolete spare parts and notify PdM MAE when components are obsolete and suitable replacements were identified. According to General Atomics' officials it had an ongoing daily process to identify obsolete spare parts. The General Atomics' officials explained as part of this process, General Atomics informed PdM MAE of all engineering changes that required a new or upgraded spare part. PdM MAE approved all changes and issued disposal instructions for each affected spare part. Additionally, PdM MAE, General Atomics, and subcontractor officials participated in a bi-weekly teleconference to monitor obsolete spare parts. The Army still accumulated obsolete spare parts because a PdM MAE official stated that the Gray Eagle system included multiple versions of components, and the Army retained the spare parts for potential future use. DoD guidance⁸ requires that DoD Components remove obsolete items from the supply systems. Therefore, PdM MAE should review the obsolete spare parts and initiate disposal of any unneeded obsolete spare parts.

⁸ DoD Manual 4140.01, Volume 9, "DoD Supply Chain Materiel Management Procedures: Materiel Programs," February 10, 2014.

Excess Spare Parts Included Within the Inventory

(FOUO)
PdM MAE
owned [REDACTED]
spare parts, valued
at \$ [REDACTED] million,
in excess
inventory.

(FOUO) PdM MAE owned [REDACTED] spare parts, valued at \$ [REDACTED] million, in excess inventory, which were not required to sustain the Gray Eagle through 2018. DoD guidance⁹ requires PdM MAE limit purchases to a maximum quantity of 2 years of stock based on demand, but provides an exception in which the purchases should not result in on-hand inventory exceeding 3 years of operating stock.

General Atomics provided how many spare parts were used during the past 2 years. Based on this information, PdM MAE had available spare parts in excess of 3 years ranging from [REDACTED] to [REDACTED] spare parts with a total value from \$ [REDACTED] to \$ [REDACTED] and years of supply ranging to more than [REDACTED] years. See Table 5 for examples of excess spare parts, years of stock on hand, and the value of the excess spare parts.

Table 5. (FOUO) Examples of Excess Spare Parts

(FOUO) Description	(FOUO) Years of Stock on Hand	(FOUO) Quantity of Excess	(FOUO) Value of Excess
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

(FOUO) For example, PdM MAE needed [REDACTED] to complete maintenance through the next 3 years. However, there are [REDACTED] in inventory, resulting in [REDACTED] excess [REDACTED], valued at \$ [REDACTED]. See Figure 6 for a picture of the [REDACTED]

⁹ DoD Manual 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning," February 10, 2014.



Spare Parts Forecasting on the Performance-Based Logistics Contract

(FOUO) PdM MAE did not verify that General Atomics considered inventory located at DoD-fielded locations when forecasting spare parts on the PBL contract. General Atomics was required to forecast and provide the spare parts needed to sustain the Gray Eagle. [REDACTED]

[REDACTED] without considering on-hand quantities of spare parts at DoD-fielded locations. According to a General Atomics official, the main concern was keeping the Poway warehouse stocked. However, [REDACTED] spare parts, or 67 percent, are located at DoD-fielded locations. See Table 7 for a comparison of available field inventory to inventory at the Poway warehouse.

Table 7. ~~(FOUO)~~ Comparison of Available Field and Poway Warehouse Inventory

Location	(FOUO) Quantity	Quantity Percentage	(FOUO) Value (in millions)	Value Percentage
DoD-fielded Locations	██████	67%	██████	65%
Poway Warehouse	██████	33%	██████	35%
Total	██████	100%	██████	100%

PdM MAE should use the inventory at DoD-fielded locations before purchasing additional spare parts from General Atomics on the PBL contract. PdM MAE should also review the contract terms and determine if the contract should be modified to require General Atomics to include inventory located at DoD-fielded locations when forecasting spare parts for the PBL contract. Additionally, PdM MAE should review General Atomics' forecasting process to verify spare parts are being forecasted based on the actual parts used.

Spare Part Purchases on Production Contracts

~~(FOUO)~~ PdM MAE did not verify that General Atomics considered current excess inventory located at DoD-fielded locations, when purchasing spare parts for the production contracts. PdM MAE provided a list of production spare parts needed to support a new Gray Eagle unit for 4 months of operation.

A General Atomics' official stated that it made or purchased the spare parts on the list and sent them to the DoD-fielded locations. However, PdM MAE did not verify that General Atomics considered that ██████, or 61 percent, of the ██████ excess spare parts were located at DoD-fielded locations and could be used to support new Gray Eagle units. See Table 8 for a breakout of the excess spare parts. PdM MAE should use the excess inventory at DoD-fielded locations before purchasing additional spare parts from General Atomics on the production contracts.

~~(FOUO)~~
PdM MAE did not verify that General Atomics considered that ██████, or 61 percent, of the ██████ excess spare parts were located at DoD-fielded locations and could be used to support new Gray Eagle units.

Table 8. ~~(FOUO)~~ Comparison of Available Field and Poway Warehouse Excess Spare Parts

Location	(FOUO) Excess Quantity	Excess Quantity Percentage	(FOUO) Excess Value (in millions)	Excess Value Percentage
DoD-fielded Locations	██████	61%	████	33%
Poway Warehouse	██████	39%	████	67%
Total	██████	100%	████	100%

Disposal of Excess Spare Parts With No Usage

~~(FOUO)~~ PdM MAE did not dispose of spare parts that were not used in the last 2 years. Of the ██████ spare parts in excess inventory, ██████ spare parts, valued at \$████ million, were included on the manufacturing lists but were not used in the past 2 years. Prior to October 2014, PdM MAE and General Atomics did not have a process to address excess spare parts. According to a PdM MAE official, PdM MAE created an Army Warehouse Management Working Group in fall 2014, to effectively manage inventory at the Poway warehouse. One of the goals of the working group was to identify and track parts with a low usage history. To do so, the working group developed the Inventory and Usage Report that identified each part listed in COLTS, the on-hand quantity, and parts used based on a 1- and 2-year period. The Inventory and Usage Report identified spare parts that were not used in the last 2 years; however, PdM MAE did not dispose of these excess spare parts. A PdM MAE official stated it will start disposing of spare parts after the FY 2016 PBL contract is approved. PdM MAE should conduct a cost-benefit analysis to determine whether it should dispose of the excess spare parts or keep the excess spare parts for future use and take the appropriate action.

Existing Government Inventory Not Used

~~(FOUO)~~ PdM MAE did not use DLA inventory prior to procuring spare parts from General Atomics. DoD guidance¹⁰ states that materiel managers should maximize the use of existing Government-owned inventory before purchasing spare parts through a PBL. Additionally, the guidance¹¹ states that the Military Departments should analyze levels of existing DoD inventories to avoid creating excess inventory, while purchasing the same items under another contract. PdM MAE was working

¹⁰ DoD Manual 4140.01, Volume 2, "DoD Supply Chain Materiel Management Procedures: Demand and Supply Planning," February 10, 2014, and an Assistant Secretary of Defense, Logistics and Materiel Readiness memorandum, "Maximum Utilization of Government Owned Inventory in Performance-Based Logistics Arrangements," December 20, 2010.

¹¹ DoD Manual 4140.01, Volume 3, "DoD Supply Chain Materiel Management Procedures: Materiel Sourcing," February 10, 2014.

(FOUO) with DLA to assign NSNs to the Gray Eagle spare parts. As of June 16, 2015, DLA assigned NSNs to [REDACTED] spare parts. DLA maintains stock for [REDACTED] of the [REDACTED] NSNs but, PdM MAE did not purchase spare parts from DLA.

Contractor Should First Use Available Government Inventory

(FOUO) PdM MAE did not require the use of existing DLA inventory prior to purchasing the spare parts through General Atomics. A PdM MAE official stated that they did not purchase any spare parts from DLA or require General Atomics to use existing DLA inventory. According to a PdM MAE official, PdM MAE plans to purchase bench stock items from DLA in the future. PdM MAE did not purchase [REDACTED] spare parts from DLA and did not maximize the use of Government-owned inventory. The DLA price was lower than the price charged by General Atomics on [REDACTED] spare parts purchased by PdM MAE. PdM MAE could save \$[REDACTED] by purchasing these spare parts from DLA when fielding future units. See Appendix C for a list of the [REDACTED] spare parts for which DLA offered a lower price than General Atomics. PdM MAE should use existing DLA inventory, when possible, before purchasing the spare parts from General Atomics.

Better Management of Spare Parts Needed

(FOUO) PdM MAE needed to better manage the Gray Eagle spare parts. PdM MAE undervalued inventory on the annual Army financial statements by more than \$[REDACTED] million. Additionally, PdM MAE kept \$[REDACTED] million in obsolete spare parts and increased their risk of additional spare parts becoming obsolete by retaining excess spare parts, valued at \$[REDACTED] million, while the Gray Eagle system was still being upgraded. Of the \$[REDACTED] million in excess spare parts, PdM MAE could save \$[REDACTED] million through 2018 by using the current excess inventory before purchasing additional spare parts. The remaining [REDACTED] spare parts, valued at \$[REDACTED] million, have not been used in the past 2 years and are not needed to support the Gray Eagle.

(FOUO) General Atomics maintained [REDACTED] of [REDACTED] obsolete and [REDACTED] of [REDACTED] excess spare parts in the Poway warehouse. PdM MAE may pay \$[REDACTED] in monthly storage costs to maintain obsolete spare parts and \$[REDACTED] to maintain excess spare parts at the Poway warehouse, for a total additional monthly storage cost of \$[REDACTED].¹² As a result, PdM MAE could save a total of \$[REDACTED] million in storage costs over the next five years by reducing the amount of obsolete and excess spare parts at the Poway warehouse. Finally, PdM MAE may pay an additional \$[REDACTED] on future spare parts purchased from General Atomics rather than using DLA inventory when fielding future Gray Eagle units.

¹² We calculated the total storage costs using the warehouse total square footage and the monthly cost for storage per square foot. We then applied that cost to the percentage of obsolete and excess spare parts.

Management Comments on the Finding and Our Response

Management Comments on Excess and Obsolete Spare Parts

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS and provided comments to the finding. The Deputy explained that PM UAS, along with PdM MAE are taking action to address the issues identified in the report.

The Deputy for Acquisition and Systems Management stated that PdM MAE is executing the Office of the Secretary of Defense approved 2013 Life Cycle Sustainment Plan that currently supports nine Gray Eagle fielded units, that have achieved 184,000 flight hours supporting 19,000 missions. He stated PdM MAE is on track to field the remaining six units by the end of FY 2018.

The Deputy for Acquisition and Systems Management stated two contributing reasons for the excess and obsolete spare parts are changing of fielding schedules after procurement activities had already been initiated and conversion of already fielded units from the One Station Ground Control Station to the Universal Ground Control Station. He explained that PdM MAE purchased spare parts based on an approved fielding schedule in 2010 that supported fielding fifteen total Gray Eagle units at the rate of one unit per year from FY 2010 through FY 2014, four units per year in FY 2015 and FY 2016, and two units in FY 2017. The Deputy for Acquisition and Systems Management stated the contracts reviewed by the DoD IG report were resourced based on the 2010 fielding schedule. According to the Deputy for Acquisition and Systems Management, in FY 2012, the Army directed a change in the fielding schedule to two units per year through FY 2018. The Deputy for Acquisition and Systems Management stated at the time of the analysis, the spare parts on hand were procured to support fielding four units in FY 2015.

The Deputy for Acquisition and Systems Management also explained PdM MAE is in the process of retrofitting all previously fielded Gray Eagle units with the Universal Ground Control Station and associated equipment and displacing the One Station Ground Control Station and associated equipment through FY 2017. The equipment from this retrofit is returned to the inventory control point for disposition and contributes to the quantity of parts in the warehouse. The Deputy for Acquisition and Systems Management stated that while not accounting for the total excess, these are contributing factors. He stated that in 2015 the Army directed an additional Gray Eagle company be fielded based on increased demands of

Intelligence, Surveillance, Reconnaissance support from combatant commanders. The Deputy for Acquisition and Systems Management explained that this additional fielding and increased deployed and non-deployed operational tempo, are consuming the excess spare parts.

Our Response

We commend the Army for taking action to correct the issues identified in this report. The comments from the Deputy for Acquisition and Systems Management are appreciated and in conjunction with the responses to the recommendations, address all specifics of the recommendations.

Recommendations, Management Comments, and Our Response

Recommendation A.1

We recommend that the Project Manager, Unmanned Aircraft System:

- a. Complete the actions necessary to include the Gray Eagle spare parts in an Army Accountable Property System of Record.**

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS. The Deputy for Acquisition and Systems Management, agreed, stating that PM UAS was already working toward APSR compliance prior to initiation of the DoD IG audit. He stated that the Statement of Federal Financial Accounting Standards directs the Military Departments to ensure it has all Government accountable property within an APSR no later than the end of FY 2017 to enable accurate financial statement reporting. The Deputy for Acquisition and Systems Management explained that COLTS and LMP are the methods by which the Army supports Gray Eagle readiness and the connection of COLTS to LMP will accomplish this requirement. Additionally, he stated that PM UAS implemented the Defense Property Accountability System in June 2015 that required inventory of all contractor managed end items and spare parts. According to the Deputy for Acquisition and Systems Management, this process provides additional oversight and control of all Government Furnished Equipment. The Deputy for Acquisition and Systems Management stated that LMP and the Defense Property Accountability System are the primary methods PM UAS uses to report to the APSR. He stated PM UAS is on track to begin implementation by the end of FY 2017.

b. Require that Product Manager–Medium Altitude Endurance:

- i. Review the obsolete spare parts and initiate disposal of any unneeded obsolete spare parts.**

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS. The Deputy for Acquisition and Systems Management agreed, stating that PdM MAE initiated the Army Warehouse Management Working Group and self-identified [REDACTED] items that required disposal. He explained disposing of these spare parts with zero demand over a 36-month period will reduce overall inventory by approximately six percent. The Deputy for Acquisition and Systems Management stated that PdM MAE is working with DCMA in San Diego, California to dispose of non-repairable and obsolete items through the Plant Clearance Automated Reutilization Screening System process. He identified the Army Warehouse Management Working Group's goal is to eliminate all obsolete and excess spare parts by 2018. In addition, the Deputy for Acquisition and Systems Management explained that the Army Warehouse Management Working Group has recommended that the prime contractor relocate current warehouse storage to a new facility at no additional cost to the Government resulting in a cost reduction of 30 percent per square foot. He stated the prime contractor is relocating the warehouse storage to a smaller footprint from April through August 2016.

- ii. Use inventory at DoD-fielded locations before purchasing additional spare parts from General Atomics on the performance-based logistics contract and production contracts and then conduct a cost-benefit analysis to determine whether it should dispose of the excess spare parts or keep the excess spare parts for future use and take the appropriate action.**

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS. The Deputy for Acquisition and Systems Management agreed, stating that the Government directed the prime contractor to utilize all excess inventory before purchasing additional spare parts. He explained that the Army Warehouse Management Working Group continues to monitor usage rates and work closely with the prime contractor to ensure the correct spare parts quantities are procured and future fielding spares packages use stocks on hand. According to

the Deputy for Acquisition and Systems Management, this is an on-going process implemented in conjunction with the Plant Clearance Automated Reutilization Screening System process. The Deputy for Acquisition and Systems Management also stated that from May through October 2015, PdM MAE did not authorize the replenishment of Gray Eagle spare parts during the bridge contract. He explained portions of the excess spare parts were used to support four deployed Gray Eagle locations and four contiguous United States Gray Eagle locations, flying over 16,200 flight hours. The Deputy for Acquisition and Systems Management stated that this significantly reduced excess spare parts while maintaining an operational readiness rate over 90 percent.

The Deputy for Acquisition and Systems Management also stated that PdM MAE is in the process of replacing the One System Ground Control Station with the Universal Ground Control Station. He explained this will decrease spare parts requirements based on increased reliability and system redesign. The Deputy for Acquisition and Systems Management stated the One System Ground Control Station product line will be phased out completely by the end of 2017, resulting in the reduction of about 30,000 spare parts, with an estimated value of \$106 million.

- iii. Review the contract terms and determine if the contract should be modified to require General Atomics to include inventory located at DoD-fielded locations when forecasting spare parts for the performance-based logistics contract and review General Atomics' forecasting process to verify spare parts are being forecasted based on the actual parts used.**

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS. The Deputy for Acquisition and Systems Management agreed, stating that the Government will require in the FY 2017 PBL contract that the prime contractor must account for all fielded Gray Eagle spare parts prior to purchasing additional spares. He explained this will be included in follow on PBL contracts as well. The Deputy for Acquisition and Systems Management also stated that total asset visibility will be created due to government direction already provided and the full implementation of LMP. He stated that PdM MAE is in the process of hiring four Government Item Managers, whose function is to help manage stock levels and fill requisitions based on demand analysis. He explained that PdM MAE has one Item Manager on board with the remaining three to be within PdM MAE by the first quarter of FY 2017. The Deputy for Acquisition and Systems Management

stated the additional visibility gives the Item Managers the ability to cross level spare part assets between all Gray Eagle fielded units before purchasing additional spare parts. According to the Deputy for Acquisition and Systems Management, this oversight will ensure the prime contractor does not purchase excess parts. Additionally, he stated the Item Managers will review the prime contractor's forecasting processes to verify spare parts are forecasted based on actual spare parts used.

iv. Use existing Defense Logistics Agency inventory, when possible, before purchasing the spare parts from General Atomics.

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS. The Deputy for Acquisition and Systems Management agreed, stating that PdM MAE is currently in the process of hiring four Item Managers from Aviation and Missile Command that will support this functional area. He explained that PdM MAE currently has one Item Manager with the remaining three to be brought on by the first quarter of FY 2017. According to the Deputy for Acquisition and Systems Management, the Item Managers will serve to help manage stockage levels and fill requisitions based on demand analysis to include spare parts processed through DLA. The Deputy for Acquisition and Systems Management explained the Item Managers will be an integral part of the Army Warehouse Management Working Group and will provide spare parts management, to include DLA parts. He stated the Item Managers will be in place prior to the award of the FY 2017 PBL contractor which will occur in the first quarter of FY 2017. Additionally, the Deputy for Acquisition and Systems Management stated PM UAS is working to transition the supply function from the COLTS Field Service Representative to the Soldier using the standard Army Aviation supply system providing access to the DLA inventory. He explained the functionality will exist for the Soldiers to order directly from DLA by November 2016.

Our Response

Comments from the Deputy for Acquisition and Systems Management, U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), addressed all specifics of the recommendations, and no further comments are required.

Finding B

Army Contracting Command Potentially Overpaid for Gray Eagle Spare Parts

(FOUO) Contracting officers did not receive fair and reasonable prices for 31 of 37¹³ non-statistically sampled spare parts, valued at \$[REDACTED] million, on the full production contract. This occurred because the contracting officers did not conduct an adequate cost or price analysis on the spare parts. Additionally, Army officials did not validate actual unit costs for [REDACTED] spare parts, valued at \$[REDACTED] million, purchased on the PBL contract. This occurred because contracting and PdM MAE officials did not obtain actual unit costs paid for the spare parts. As a result, Army officials potentially paid \$[REDACTED] million in excess of fair and reasonable prices on the full production contract and will potentially overpay \$[REDACTED] million on spare parts purchased to field future units. Additionally, contracting officers cannot transition the PBL cost contract to a fixed price contract because it did not obtain actual unit costs paid for spare parts.

Army Contracting Command Did Not Receive Fair and Reasonable Prices

(FOUO)
Contracting officers did not receive fair and reasonable prices for 31 of 37 non-statistically sampled spare parts, valued at \$[REDACTED] million, on the full production contract.

(FOUO) Contracting officers did not receive fair and reasonable prices for 31 of 37 non-statistically sampled spare parts, valued at \$[REDACTED] million, on the full production contract. Federal guidance¹⁴ requires contracting officers to purchase supplies and services at fair and reasonable prices. In establishing the reasonableness of offered prices, contracting officers shall obtain certified cost or pricing data when required by Federal guidance.¹⁵ When certified cost or pricing data are not required, contracting officers shall obtain other-than-certified cost or pricing data to establish fair and reasonable prices. Although the contracting officer determined prices on the full production contract were fair and reasonable, we identified that contracting officers did not receive fair and reasonable prices for 31 of the 37 sampled spare parts. For example, ACC-RSA

¹³ We non-statistically selected 40 spare parts to review but General Atomics could not provide the data needed to analyze three spare parts. See Appendix A for a discussion of our non-statistical audit sample.

¹⁴ Federal Acquisition Regulation 15.402, "Pricing Policy," May 29, 2014.

¹⁵ Federal Acquisition Regulation 15.403-4, "Required Certified Cost or Pricing Data," May 29, 2014.

(FOUO) determined that an average price of \$ [REDACTED] was fair and reasonable for the Tactical Automatic Landing System, Tracking Sub-System with Reusable Container. General Atomics' average costs for the part provided to the DoD OIG, including all cost factors,¹⁶ was [REDACTED] resulting in a payment of [REDACTED] above a fair and reasonable price. See Figure 9 for a picture of a Tactical Automatic Landing System, Tracking Sub-System with Reusable Container.



Figure 9. Tactical Automatic Landing System, Tracking Sub-System with Reusable Container
Source: General Atomics

¹⁶ Cost factors are core management costs, facilities capital cost of money, and profit.

Inadequate Fair and Reasonable Price Analysis

(FOUO) Contracting officers did not conduct an adequate cost or price analysis on spare parts purchased on the full production contract. ACC-RSA contracting officers awarded General Atomics the full production contract on September 13, 2013, to provide spare part lots necessary to field a Gray Eagle unit. A lot is the standard set of spare parts initially sustaining a Gray Eagle unit for approximately 4 months. ACC-RSA and General Atomics agreed to \$[REDACTED] million for four lots along with an option to purchase additional spare parts for \$[REDACTED] million but the contract did not include actual spare-parts unit costs. On February 27, 2014, the contracting officer modified the base contract to establish spare parts prices based on proposed prices from General Atomics, rather than actual spare-parts unit costs. ACC-RSA and General Atomics agreed to \$[REDACTED] million for four lots of spare parts along with an option for additional spare parts at a cost of \$[REDACTED] million.

(FOUO)
Contracting officers did not conduct an adequate cost or price analysis on spare parts purchased on the full production contract.

(FOUO) On March 31, 2014, the contracting officer requested that DCAA verify that General Atomics' direct labor, direct material, and applicable indirect costs comply with Federal guidance. The contracting officer also requested DCAA to audit the proposed subcontract costs. During June 2014, DCAA issued multiple audit reports to the contracting officer that questioned \$[REDACTED] million of the proposed \$[REDACTED] million for direct labor and materials. In addition, DCAA identified that General Atomics' proposal included \$[REDACTED] of unsupported direct material costs. Finally, DCAA identified that \$[REDACTED] million of the \$[REDACTED] million (or [REDACTED] percent) in proposed subcontract costs and associated indirect costs were questionable or unsupported. In September 2014, the contracting officer definitized¹⁷ the spare-part unit costs without conducting an adequate price analysis. The contracting officer reduced the final total cost of the spare parts by \$[REDACTED] for the four lots of initial spare parts, and \$[REDACTED] on the option to purchase additional spare parts. The contracting officer should have reviewed and verified the fair and reasonable price determinations because DCAA questioned [REDACTED] percent of subcontract and indirect costs for the full production contract. Federal guidance¹⁸ requires that contracting officers determine fair and reasonable prices for the prime contract, including subcontracting costs. The contracting officer should consider whether

¹⁷ Definitization occurs when a firm price is established in the basic contract or by modification.

¹⁸ Federal Acquisition Regulation 15.404-3, "Subcontract Pricing Considerations," May 29, 2014.

(FOUO) the prime contractor conducted a cost or price analysis of proposed subcontractor prices in determining the reasonableness of the prime contractor proposed prices. ACC-RSA should verify contracting officers conduct an adequate fair and reasonable price analysis as required by Federal guidance for spare parts purchased on the full production contract.¹⁹

Actual Unit Costs Not Validated

(FOUO) Army officials did not validate actual unit costs for [REDACTED] spare parts, valued at \$ [REDACTED] million, purchased on the PBL contract.

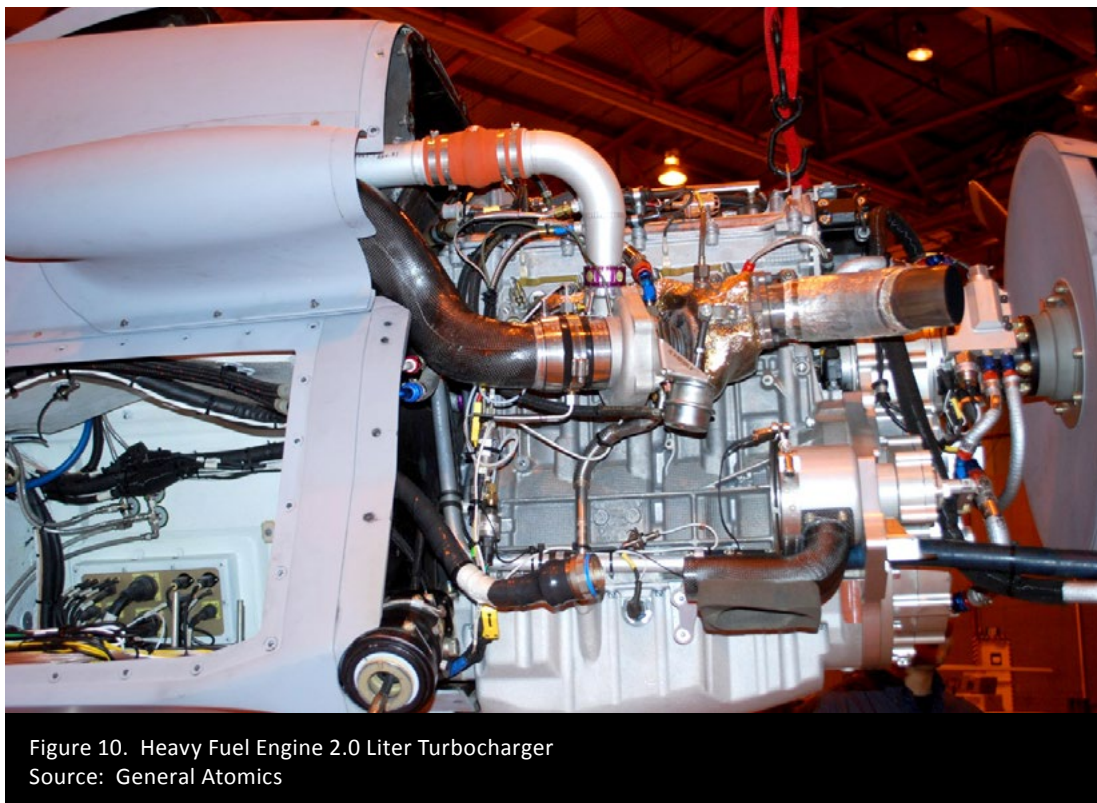
(FOUO) Army officials did not validate actual unit costs for [REDACTED] spare parts, valued at \$ [REDACTED] million, purchased on the PBL contract. Contracting officers negotiated the overall spare parts contract amount based on estimated quantities and unit prices of spare parts needed to sustain the Gray Eagle. The contracting officers did not validate the number of spare parts ordered and did not obtain the actual unit costs paid for each spare part at the end of each contract year. In

addition, PdM MAE officials did not obtain actual unit costs paid for spare parts on the PBL contract. Federal guidance²⁰ states comparing proposed costs with previous actual costs is a technique for verifying fair and reasonable pricing. Additionally, DoD guidance²¹ states that an evaluation of actual costs provides a firm baseline for determining price reasonableness. Actual costs should be collected during execution and utilized during follow-on negotiations to ensure the best value is negotiated. For example, between 2012 and 2015, contracting officers purchased [REDACTED] Heavy Fuel Engine 2.0 Liter Turbochargers at an average unit cost of [REDACTED] for a total value of [REDACTED]. General Atomics proposed an estimated unit cost of \$ [REDACTED] for a total value of \$ [REDACTED] million. The contracting officer did not obtain actual unit cost for the Heavy Fuel Engine 2.0 Liter Turbocharger to establish an accurate baseline and could potentially overpay on future contracts. See Figure 10 for a picture of the Heavy Fuel Engine 2.0 Liter Turbocharger.

¹⁹ Federal Acquisition Regulation 15.402, "Pricing Policy," May 29, 2014.

²⁰ Federal Acquisition Regulation 15.404-1 (c)(2)(iii), "Proposal analysis techniques," May 29, 2014.

²¹ Office of the Assistant Secretary of Defense for Logistics & Materiel Readiness PBL Guidebook, "Section 2: Step 11 Establish/Refine Product Support Arrangements," May 27, 2014.



The contracting officers confirmed that ACC-RSA was not receiving actual unit costs and agreed they would work with General Atomics to obtain the actual unit costs. ACC-RSA should request actual unit spare parts costs on the PBL for determining fair and reasonable prices on future contracts.

(FOUO) In addition, PdM MAE could not provide actual unit costs. According to a PdM MAE official, PdM MAE requested that General Atomics begin adding purchase order information in COLTS to identify the actual quantity and unit cost of spare parts purchased. However, General Atomics included unit costs in COLTS that were generated from one of four different sources²² and not the actual unit costs paid by the Army. For example, the COLTS price for a Servo Assembly was \$ [REDACTED] and the average price paid by the Army, including all cost factors, was [REDACTED] resulting in a difference of [REDACTED]. PM UAS should verify that COLTS includes the Army's actual unit cost of the spare parts purchased.

²² The four different sources of unit costs could come from the logistics management information, Haystacks pricing data, General Atomics' estimates, or prices paid by General Atomics.

Management Actions Taken

Contracting officials initiated actions to obtain actual spare parts unit costs on the PBL and full production contracts for determining fair and reasonable prices. Specifically, contracting officers issued solicitations requiring the contractor and major subcontractors to provide actual costs for FY 2013 through FY 2017 contracts. ACC-RSA officials acknowledged that actual cost or price information is essential in their efforts to establish a baseline cost estimate and obtain a fair and reasonable price. The solicitations were issued during November and December 2015.

Spare Part Overpayments

(FOUO)
Army officials paid \$[REDACTED] million in excess of fair and reasonable prices for 31 of 37 sampled spare parts on the full production contract.

(FOUO) Army officials paid \$[REDACTED] million in excess of fair and reasonable prices for 31 of 37 sampled spare parts on the full production contract. Army officials paid \$[REDACTED] million for 31 of 37 spare parts; however, Army officials should have paid \$[REDACTED] million for those same spare parts. For the remaining six sample items, the Army officials paid \$[REDACTED] less than the fair and reasonable price. Additionally, Army officials will potentially overpay \$[REDACTED] million on future spare parts purchased at the full production contract prices when fielding eight additional Gray Eagle units. See Appendix D for a list of overpayments and underpayments on spare parts for the 37 sample items. ACC-RSA should assess and determine whether overpayments were made and implement available options to seek recovery, to include voluntary refunds in accordance with Defense regulations,²³ of the overpayments identified on the 31 of 37 sample parts.

(FOUO) Additionally, contracting officers cannot transition the PBL to a fixed price contract. If the contracting officers were to transition to a fixed price contract using full-production contract-unit spare-part prices, the prices would be in excess of fair and reasonable. As a result, the Army would not receive the best value to the Government if they converted the PBL to a fixed price contract. ACC-RSA originally established the PBL as a cost-reimbursable contract with the goal of converting to a fixed price contract when the Army had sufficient data to determine fair and reasonable prices, as preferred by the memorandum "Government Contracting," issued by President Barack Obama on March 4, 2009. The Army officials did not obtain actual unit costs for [REDACTED] spare parts, valued

²³ Defense Federal Acquisition Regulation 242.71, "Voluntary Refunds," November 9, 2005.

(FOUO) at \$ [REDACTED] million, purchased on the PBL contract. However, if contracting officers do not obtain actual unit costs, ACC-RSA cannot adequately determine fair and reasonable prices to convert the PBL to a fixed price contract. ACC-RSA should develop an action plan with defined milestones to transition to a fixed price contract for spare parts.

Recommendations, Management Comments, and Our Response

Recommendation B.1

We recommend the Executive Director, Army Contracting Command, Redstone Arsenal to:

- a. Verify contracting officers conduct an adequate fair and reasonable price analysis for spare parts purchased on the full production contract as required by Federal Acquisition Regulation 15.402.**

Army Materiel Command Comments

The Deputy Chief of Staff, Army Materiel Command provided responses for the Executive Director, ACC-RSA. The Deputy Chief of Staff agreed, stating he will verify the contracting officer conducts, as required by Federal Acquisition Regulation 15.402, an adequate fair and reasonable analysis for spare parts purchased on the full production contract. The Deputy Chief of Staff stated this will be accomplished through the business clearance process where at least two management levels with contracting authority above the contracting officer will review the price negotiation memorandum prior to contract award. He explained for this contract award, the price negotiation memorandum will be reviewed by the ACC-RSA UAS Chief of the Contracting Office, and approved by the ACC-RSA Principal Assistant Responsible for Contracting, who is also the ACC-RSA Executive Director. The Deputy Chief of Staff provided an acquisition instruction which contains policies and procedures, including review and approval thresholds, for the business clearance process.

The Deputy Chief of Staff stated that the price negotiation memorandum will document that the agreement reached is fair and reasonable, how that determination was reached, and indicate what information the negotiator relied upon for settlement, in accordance with Federal Acquisition Regulation 15.406-3.

He expects to award the contract by September 30, 2016. Based on this award date, the Deputy Chief of Staff stated that he will provide the approved price negotiation memorandum to the DoD OIG by October 31, 2016.

- b. Request actual unit spare-parts costs purchased on the Performance-Based Logistics contract for determining fair and reasonable prices on future contracts.**

Army Materiel Command Comments

The Deputy Chief of Staff, Army Materiel Command provided responses for the Executive Director, ACC-RSA. The Deputy Chief of Staff agreed, stating he provided the DoD OIG with two solicitations and an amendment to each solicitation for future Gray Eagle contracts. The Deputy Chief of Staff stated the amendments request that the contractor provide actual unit costs for spare parts purchased on the PBL contract as well as other contracts that are predecessors to the requirements being solicited.

- c. Assess and determine whether overpayments were made and implement available options to seek recovery, to include voluntary refunds in accordance with Defense Federal Acquisition Regulation Supplement 242.71 of the overpayments identified on the 31 of 37 sample parts.**

Army Materiel Command Comments

The Deputy Chief of Staff, Army Materiel Command, provided responses for the Executive Director, ACC-RSA. The Deputy Chief of Staff agreed, stating that he will assess and determine whether overpayments were made and implement available options to seek recovery, to include voluntary refunds in accordance with Defense Federal Acquisition Regulation Supplement 242.71. He stated that ACC-RSA will request that the DoD OIG audit team provide data and calculations adequate for ACC-RSA to duplicate the team's findings regarding overpayments. The Deputy Chief of Staff explained that this will be the basis for their assessment and determination. However, he recognizes that the DoD OIG may not be at liberty to disclose certain cost information provided by the contractor with restrictions during the course of the audit. The Deputy Chief of Staff stated that ACC-RSA will pursue any such information directly from the contractor.

The Deputy Chief of Staff stated that ACC-RSA will also obtain a legal opinion identifying available options to seek recovery of such overpayments. He explained that at this time it is unknown to what extent ACC-RSA will be able to determine overpayments, what options are available to seek recovery of any overpayments identified and how long it will take to actually recover any such overpayments. However, the Deputy Chief of Staff stated the goal is to initiate recovery, such as issuing a demand letter to the contractor, by September 30, 2016.

- d. **Develop an action plan with defined milestones for the Performance-Based Logistics contract to transition to a fixed price contract for spare parts.**

Army Materiel Command Comments

The Deputy Chief of Staff, Army Materiel Command, provided responses for the Executive Director, ACC-RSA. The Deputy Chief of Staff agreed, stating he will develop an action plan with defined milestones for the PBL contract to transition to a fixed price contract for spare parts. The Deputy Chief of Staff explained the plan will be developed in conjunction with the negotiation and award of the contract and will be provided, along with the Price Negotiation Memorandum by October 31, 2016.

Our Response

Comments from the Deputy Chief of Staff, AMC, for the Executive Director, ACC-RSA addressed all specifics of the recommendations, and no further comments are required. Additionally, he stated that ACC-RSA will request that the DoD OIG audit team provide data and calculations adequate for ACC-RSA to duplicate the team's finding regarding overpayments. However, as acknowledged in his comments the DoD OIG may not be at liberty to disclose contractor information and agreed to pursue obtaining the information from the contractor. The Deputy Chief of Staff's official comments included two solicitations and amendments and an acquisition instruction that were not included in the comments section of this report because of their size.

Recommendation B.2

We recommend that the Project Manager, Unmanned Aircraft System, verify that the Catalog, Order, and Logistics Tracking System include the Army's actual unit cost of the spare parts purchased.

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Comments

The U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), responded for PM UAS. The Deputy for Acquisition and Systems Management agreed, stating PdM MAE is working with the contracting officer, ACC-RSA, and the prime contractor to establish spare part unit costs for future PBL contracts. He explained that in the FY 2017 PBL contract Request For Proposal, the contractor is being

required to submit their actual spare parts cost in the performance of prior year PBL efforts. According to the Deputy for Acquisition and Systems Management, data will be reviewed as a starting point for verification of the COLTS spare parts unit prices.

Our Response

Comment from the U.S. Army Deputy for Acquisition and Systems Management, Assistant Secretary of the Army (Acquisition, Logistics, and Technology), addressed all specifics of the recommendation, and no further comment is required.

Appendix A

Scope and Methodology

We conducted this performance audit from May 2015 through February 2016 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

To determine if Army officials effectively managed Gray Eagle spare parts, we reviewed documentation related to spare parts inventory, metrics, pricing, and requirements from September 25, 2009, through October 20, 2015. We met with General Atomics officials, shared the draft report, considered their comments, and made changes to the report where appropriate.

Spare-Parts Pricing

(FOUO) ACC-RSA purchased [REDACTED] spare parts, valued at \$[REDACTED] million, for the Gray Eagle on five contracts.²⁴ We non-statistically sampled 40 spare parts, valued at \$[REDACTED] million, to determine whether the ACC-RSA received fair and reasonable prices. General Atomics officials originally stated they could not provide actual unit costs for the sample items. However, General Atomics provided actual unit costs for 31 of 40 sampled spare parts. In addition, General Atomics provided cost and price analysis reports and fair and reasonable pricing packages that included purchase orders or purchase order histories used to calculate actual unit costs for 6 of 40 sampled parts. General Atomics could not provide actual unit costs for the remaining three spare parts. We compared the actual unit costs for 37 spare parts, valued at \$[REDACTED] million, to actual unit prices paid on the full production contract to determine whether the ACC-RSA received fair and reasonable prices.

Spare-Parts Inventory

(FOUO) General Atomics maintained the Gray Eagle spare parts in COLTS. As of June 15, 2015, PdM MAE officials provided COLTS data that included [REDACTED] spare parts, located in the General Atomics Poway, California warehouse and various DoD-fielded locations. COLTS included a unit cost for each spare part; however, the COLTS unit costs were not the actual unit costs paid by the Army. Army officials could not provide the actual unit costs for each spare part. In order to calculate

²⁴ Contract Numbers W58RGZ-10-C-0068, W58RGZ-11-C-0099, W58RGZ-12-C-0057, W58RGZ-12-C-0075, and W58RGZ-13-C-0109.

(FOUO) the actual unit cost paid by the Army, we used the full production contract unit price for [REDACTED] spare parts, valued at \$[REDACTED] million, and the COLTS unit costs for [REDACTED] spare parts, valued at \$[REDACTED] million, resulting in a total cost of \$[REDACTED] million. The full production contract and COLTS did not include a unit cost for [REDACTED] spare parts.

(FOUO) We reviewed all of the [REDACTED] spare parts, valued at \$[REDACTED] million, to identify available inventory. Of the [REDACTED] spare parts, we identified [REDACTED] spare parts, valued at \$[REDACTED] million, were available to sustain the Gray Eagle. We did not review the [REDACTED] unavailable²⁵ spare parts because it represented less than 1 percent of the total spare parts inventory. We reviewed the [REDACTED] available spare parts to identify the spare parts needed to sustain the Gray Eagle through 2018, obsolete, and excess spare parts. Specifically, PdM MAE and General Atomics provided manufacturing lists of spare parts for all versions of the Gray Eagle, two years of usage data, and spare part lead times. We compared the available inventory to the manufacturing lists of spare parts. In addition, we compared the available inventory to the usage data and spare part lead times to identify that PdM MAE will use [REDACTED] spare parts, valued at \$[REDACTED] million, to sustain the Gray Eagle through 2018. We then identified [REDACTED] excess spare parts, valued at \$[REDACTED] million, which were not needed to sustain the Gray Eagle through 2018. Finally, we identified [REDACTED] obsolete spare parts, valued at \$[REDACTED] million, which were not included on the manufacturing lists and validated by General Atomics officials to be obsolete.

To accomplish the audit objective, we interviewed:

- **Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics) officials** to identify their roles and responsibilities related to spare parts management and discuss DoD policies and procedures related to spare parts inventory management and pricing.
- **Headquarter Department of the Army G-4; U.S. Army Materiel Command; and the U.S. Army Aviation & Missile Command officials** to identify their roles and responsibilities related to spare parts management and discuss policies related to inventory management.
- **PM UAS and PdM MAE officials** to understand their roles, responsibilities, and processes related to flight-hour requirements, spare-parts forecasting, contract metrics, inventory accountability, contractor oversight, and excess and obsolete inventory. Specifically, we reviewed documentation

²⁵ Unavailable spare parts are parts in a repair or scrap status.

that included the business-case analysis, statements of assurance, life-cycle sustainment plan, quality-assurance surveillance plan, COLTS system information, fielding schedules, list of parts used to manufacture the Gray Eagle, usage and inventory report, and statements of work.

- **ACC-RSA officials** to understand their roles, responsibilities, and processes related to Gray Eagle contracting and determining reasonable prices for spare parts. Specifically, we reviewed contract documentation that included requests for proposals, statements of work, base contracts, and modifications for five contracts.
- **General Atomics officials** to understand their roles, responsibilities, and processes related to spare-parts forecasting, flight-hour requirements, inventory management, and spare-parts pricing. Specifically, we reviewed documentation that included spare-parts forecasting and inventory-management-process charts, a lead-time report, lists of parts used to manufacture the Gray Eagle, purchase orders, pricing reports, and cost and price analysis reports.
- **DLA officials** to identify the DLA inventory, demand, and pricing for Gray Eagle spare parts. We reviewed DLA inventory, demand, and pricing reports along with Department of Defense Automatic Addressing Code documentation.
- **DCAA officials** to discuss their roles and responsibilities related to proposal and voucher audits, as well as contract negotiation support. We reviewed DCAA documentation that included Gray Eagle proposal audit reports and voucher-review checklists.
- **DCMA officials** to discuss their roles and responsibilities related to administration of the Gray Eagle contracts, including acceptance of spare parts. We reviewed documentation that included the memorandum of agreement, the quality-assurance surveillance plan, corrective-action reports, forward-pricing-rate agreements and recommendations, status of General Atomics' business systems report, and the integrated cost analysis team subcontractor review reports.

We reviewed Federal and DoD guidance²⁶ to determine whether Army officials effectively managed Gray Eagle spare parts.

²⁶ Public Law 111-84, "National Defense Authorization Act for Fiscal Year 2010," October 28, 2009; Federal Acquisition Regulation 45, "Government Property," April 2, 2012; Federal Acquisition Regulation 46.5, "Acceptance," June 14, 2007; DoD Manual 4140.01, Volume 2, "DoD Supply Chain Management Procedures: Demand and Supply Planning," February 10, 2014; DoD Manual 4140.01, Volume 3, "DoD Supply Chain Materiel Management Procedures: Materiel Sourcing," February 10, 2014; DoD Manual 4140.01, Volume 9, "DoD Supply Chain Materiel Management Procedures: Materiel Programs," February 10, 2014; Statement of Federal Financial Accounting Standards No. 6, "Accounting for Property, Plant, and Equipment," June 1996; Assistant Secretary of Defense, Logistics Materiel, and Readiness memorandum, "Maximum Utilization of Government Owned Inventory in Performance-Based Logistics Arrangements," December 20, 2010.

Use of Computer-Processed Data

We relied on computer processed data obtained from Army's COLTS and Paperless Contracting File systems and the General Atomics' System, Application, and Products in Data Processing and Made To Order systems. In addition to using Army and General Atomics' systems, we relied on computer-processed data from the Electronic Document Access database.

We selected a non-statistical sample of 30 of 1,760 available unique spare parts located at the Poway warehouse and conducted a physical inventory to test COLTS accuracy. We selected 20 high-dollar spare parts with low quantities identified in COLTS and randomly selected 10 spare parts from the floor of the Poway warehouse to conduct the physical inventory. We compared the contract documentation we received from Electronic Document Access to the contract documentation received from the Paperless Contracting File system. We selected a non-statistical sample of 40 of 3,473 available unique spare parts and recalculated the fair and reasonable prices using cost and price documentation obtained from General Atomics and compared these fair and reasonable prices to System, Application, and Products in Data Processing and Made To Order documentation. To select the 40 spare parts, we randomly selected high, medium and low-dollar value spare parts to review. Based on our comparisons and computations, we determined that the data were sufficiently reliable for the purposes of this report.

Appendix B

Prior Coverage

During the last 5 years, the Government Accountability Office (GAO), the Department of Defense Inspector General (DoD IG), and the Army Audit Agency issued 19 reports discussing Army spare parts or the Gray Eagle. Unrestricted GAO reports can be accessed at <http://www.gao.gov>. Unrestricted DoD IG reports can be accessed at <http://www.dodig.mil/pubs/index.cfm>. Unrestricted Army Audit Agency reports can be accessed at <https://www.aaa.army.mil/>.

GAO

GAO-15-350, "Services Generally Have Reduced Excess Inventory, but Additional Actions Are Needed," April 20, 2015

GAO-14-340SP, "Assessment of Selected Weapon Programs," March 31, 2014

DoD IG

DODIG-2015-137, "Improvements Needed on DoD Procurements from Robertson Fuel Systems," June 25, 2015

DODIG-2015-128, "Army Needs to Improve Processes Over Government-Furnished Material Inventory Actions," May 21, 2015

DODIG-2015-104, "Summary of DoD Office of Inspector General Spare-Parts Inventory Audits: Additional Guidance is Needed," March 31, 2015

DODIG-2015-103, "Summary of DoD OIG Spare-Parts Pricing Audits: Additional Guidance is Needed," March 31, 2015

DODIG-2015-050, "Improvement Needed for Inventory Management Practices on the T700 Technical, Engineering, and Logistical Services and Supplies Contract," December 10, 2014

DODIG-2014-020, "U.S. Army Contracting Command Did Not Obtain Fair and Reasonable Prices for Communications Equipment," December 5, 2013

DODIG-2013-104, "DoD Oversight Improvements Are Needed on the Contractor Accounting System for the Army's Cost-Reimbursable Stryker Logistics Support Contract," July 16, 2013

DODIG-2013-103, "Boeing Overstated Contract Requirements for the CH-47F Helicopter," July 16, 2013

DODIG-2013-025, "Accountability Was Missing for Government Property Procured on the Army's Services Contract for Logistics Support of Stryker Vehicles," November 30, 2012

DODIG-2012-102, "Better Cost-Control Measures Needed on the Army's Cost-Reimbursable Services Contract for Logistics Support of Stryker Vehicles," June 18, 2012

DODIG-2012-004, "Changes Are Needed to the Army Contract With Sikorsky to Use Existing DoD Inventory and Control Costs at the Corpus Christi Army Depot," November 3, 2011

D-2011-104, "Pricing and Escalation Issues Weaken the Effectiveness of the Army Contract with Sikorsky to Support the Corpus Christi Army Depot," September 8, 2011

D-2011-061, "Excess Inventory and Contract Pricing Problems Jeopardize the Army Contract with Boeing to Support Corpus Christi Army Depot," May 3, 2011

Army

A-2014-0071-IEI, Memorandum, "Audit of Plans for Demolishing Excess Property," June 2, 2014

A-2013-0144-ALA, "Audit of the Army Program Office Estimate for the MQ-1C Gray Eagle," September 13, 2013

A-2013-0104-ALS, "Followup Audit of Project Manager Assets, Aviation," June 3, 2013

A-2012-0197-ALM, "Contractor Logistics Support," September 27, 2012

Appendix C

Parts Defense Logistics Agency Provides for a Lower Price than General Atomics

(FOUO) DLA provided a lower price than General Atomics on [REDACTED] spare parts that PdM MAE purchased on the production contract. See Table 11 for a list of the [REDACTED] spare parts and price differences.

Table 11. (FOUO) Spare Parts with Lower Prices from DLA

(FOUO) Part Count	(FOUO) Part Number	(FOUO) Production Contract Unit Price*	(FOUO) DLA Unit Price	(FOUO) Unit Difference	(FOUO) Quantity To Field Future Units	(FOUO) DLA Difference for Future Units
[REDACTED]						

(FOUO) Part Count	(FOUO) Part Number	(FOUO) Production Contract Unit Price*	(FOUO) DLA Unit Price	(FOUO) Unit Difference	(FOUO) Quantity To Field Future Units	(FOUO) DLA Difference for Future Units

(FOUO) Part Count	(FOUO) Part Number	(FOUO) Production Contract Unit Price*	(FOUO) DLA Unit Price	(FOUO) Unit Difference	(FOUO) Quantity To Field Future Units	(FOUO) DLA Difference for Future Units

* This is the weighted average of the unit price from each full production lot ordered on contract W58RGZ-13-C-0109.

Appendix D

Spare Part Overpayments

(FOUO) Army officials paid \$ [REDACTED] million in excess of fair and reasonable prices for 31 of 37 sampled spare parts on the full production contract. Army officials paid \$ [REDACTED] million for 31 of 37 spare parts; however, Army officials should have paid \$ [REDACTED] million for those same spare parts. For the remaining six sample items, Army officials paid \$ [REDACTED] less than the fair and reasonable price. Additionally, Army officials will potentially overpay \$ [REDACTED] million on future spare parts purchased at the full production contract prices when fielding eight additional Gray Eagle units. See Table 12 for a list of the overpayments and underpayments on the 37 spare parts.

Table 12. (FOUO) Spare Part Overpayments

Part Count	Part Number	(FOUO) Production Contract Quantity	(FOUO) Difference Between Contract Price and Actual Price	(FOUO) Over/Under Payment on Prior Purchase	(FOUO) Quantity To Field Future Units	(FOUO) Over/Under Payment on Future Purchases
1	7190025+005	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
2	UWA13310-5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
3	0201-10-016-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
4	UWA13120-5	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
5	0201-10-017-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
6	UWA13050-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
7	SCD01208-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
8	00424000-03	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
9	UWA51230-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
10	UWA51130-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
11	MS21043-04	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
12	UWA14020-2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
13	UWA13360-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
14	UWA31400-1	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
15	UWA43400-2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
16	UWA32048-2	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
17	1024327G-3	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Part Count	Part Number	(FOUO) Production Contract Quantity	(FOUO) Difference Between Contract Price and Actual Price	(FOUO) Over/Under Payment on Prior Purchase	(FOUO) Quantity To Field Future Units	(FOUO) Over/Under Payment on Future Purchases
18	UWA13280-1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
19	UWA13148-1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
20	DR28520T	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
21	SCD00729-1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
22	UWA51175-6	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
23	NAS1351-8H48P	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
24	PLT2M-C0	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
25	UWA51200-1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
26	AN920-03C	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
27	2-226FF200	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
28	MS21042-04	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
29	UPA51035	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
30	UWA44043-1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
31	00420004-03	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
	Sub-Total	(FOUO)	(FOUO)	\$(FOUO)	(FOUO)	\$(FOUO) *
32	60053121-002	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
33	NAS517-3-32	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
34	UWA31400-2	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
35	NAS6610H1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
36	UWA51000-1	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
37	SCD00584-4	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO)
	Sub-Total	(FOUO)	(FOUO)	(FOUO)	(FOUO)	(FOUO) *
	Total	(FOUO)	(FOUO)	\$(FOUO) *	(FOUO)	\$(FOUO) *

* Totals and Sub-Totals do not equal the actual sum due to rounding.

Management Comments

Assistant Secretary of the Army (Acquisition, Logistics, and Technology)



DEPARTMENT OF THE ARMY
OFFICE OF THE ASSISTANT SECRETARY OF THE ARMY
ACQUISITION LOGISTICS AND TECHNOLOGY
103 ARMY PENTAGON
WASHINGTON DC 20310

SAAL-ZS

MEMORANDUM FOR THE AUDITOR GENERAL, U.S. ARMY AUDIT AGENCY, 6000
6TH STREET, BUILDING 1464, MAILSTOP 5855, FORT BELVOIR, VA 22060

SUBJECT: Official Army Position, Reply to Draft Department of Defense Inspector
General Report on Army's Management of Gray Eagle Spare Parts Needs Improvement
(project number D2015-D000AT-0183.000)

1. The Project Manager for Unmanned Aircraft Systems and The Army Contracting
Command – Redstone Arsenal concur with the Inspector General's findings in the subject
report and provide corrective actions in enclosures 1 and 2, respectively.

2. The point of contact for this action is [REDACTED] or
[REDACTED].

Encls

L. Neil Thurgood
Major General, U.S. Army
Deputy for Acquisition and
Systems Management

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (cont'd)

Project: D2015-D000AT-0183.000

Audit Location: Redstone Arsenal

Objective Designation:

Objective Title: Army's Management of Gray Eagle Spare Parts Needs Improvement

Objective: To determine whether the Department of the Army effectively managed MQ-1C Gray Eagle spare parts

PM UAS Comments:

The Unmanned Aircraft System Project Office (UAS PO) provided support, cooperation and collaboration with the DoD IG in the conduct of their inquiry. PM UAS concurs with comments on the recommendations stated in the DoD IG Draft report. Of the six total recommendations, PM UAS already identified three of the areas recommended for correction and was already in the process of addressing the issues. In these instances, the DoD IG report records what was already being done by the Product Manager Medium Altitude Endurance (PdM MAE). Of the remaining three items the resolution is a byproduct of the path PdM MAE was already pursuing with respect to Army Accountable Property System of Record (ASPR), Obsolete and Excess recommendations. PdM MAE is dovetailed with ACC-RSA in its approach to resolve spare parts issues relative to cost analysis and a transition to fixed price contracts.

PdM MAE is executing the Office of the Secretary of Defense (OSD) approved 2013 Life Cycle Sustainment Plan (LCSP). The program currently supports nine Gray Eagle fielded units, of which three are continuously deployed to five locations providing combat power to the combatant commanders. To date, Gray Eagle units have achieved 184,000 flight hours supporting 19,000 missions. PdM MAE is on track to field the remaining six units by the end of Fiscal Year (FY) 18.

The DoD IG stated purpose the Gray Eagle program was selected to be part of a DoD IG audit is due to the infancy of the program and the ability to have an impact on the overall program life cycle.

Two of the contributing reasons for the excess and obsolete parts are changing of fielding schedules after procurement activities had already been initiated and conversion of already fielded units from the One Station Ground Control Station (OSGCS) to the Universal Ground Control Station (UGCS). Based on an approved fielding schedule in 2010, PdM MAE purchased spares that supported fielding fifteen total Gray Eagle units at the rate of one unit per year from FY10-FY14 ramping up to four units per year FY15-FY16 and the two final units fielded in FY17. The contracts looked at for the DoD IG report were resourced based on the 2010 fielding schedule. In FY12, the Army directed a change in the fielding schedule to two unit fielding's per year through FY18. At the time of the analysis, the spare parts on hand were procured to support fielding four units in FY15. Additionally, PdM MAE is in the process of retrofitting all previously fielded Gray Eagle units with the Universal Ground Control Station and associated equipment and displacing the One Station Ground Control Station and associated equipment through FY2017. The equipment from this retrofit is returned to the inventory control point for disposition and contributes to the quantity of parts in the warehouse. While not accounting for the total excess, these are contributing factors. In 2015 the Army directed an additional Gray Eagle company be fielded based on increased demands of Intelligence, Surveillance, Reconnaissance (ISR)

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (cont'd)

support from combatant commanders. Due to this additional fielding and increased deployed and non-deployed operational tempo, the excess spares are being consumed.

PdM MAE initiated a Cost Benefit Analysis (CBA) in 2013 on the Inventory Control Point (ICP) identifying several areas of concern. PdM MAE took the action to focus on the reduction of warehouse space, cost avoidance opportunities, increased accountability, and reduced shipping timelines. In January 2015, PdM MAE established the Army Warehouse Management Working Group (AWMWG) to reduce the logistics foot print by reducing spares and obsolete items. The Phase I analysis identified [REDACTED] items not used within the past 36 months. This information was provided to the DoD IG in support of this audit. Phase II effort will evaluate the demand analysis for 24 months to identify potential over stockage and obsolete parts. This is in compliance with DoD Manual 4140.01.

Due to the results of the 2013 CBA, the AWMWG, and in compliance with the Statement of Federal Financial Accounting Standards, PdM MAE initiated a multi-phased approach in 2015. Phase I included the hiring of government Item Managers and developing and integrating a Logistics Modernization Program (LMP) applet for Catalog, Order, and Logistics Tracking System (COLTS) that provides total asset visibility per DoD Manual 4140.01. Phase II will transition the supply function from the COLTS Field Service Representative (FSR) to the Soldier utilizing the standard Army Aviation supply system. This is expected to be complete by 1QFY17 and in compliance with the Statement of Federal Financial Accounting Standards.

DoD IG Findings:

Product Manager-Medium Altitude Endurance (MAE) officials did not effectively manage Gray Eagle spare parts inventory. Specifically, PM MAE did not report [REDACTED] spare parts, valued at [REDACTED] million, on the annual Army financial statements; owned [REDACTED] spare parts, valued at [REDACTED] million, in available inventory that included excess and obsolete spare parts; did not use Defense Logistics Agency (DLA) inventory prior to procuring spare parts from General Atomics. This occurred because PM MAE officials retained obsolete spare parts for potential future use and did not:

- include the spare parts in an Army Accountable Property System of Record (APSR)
- verify that General Atomics considered inventory located at DoD fielded locations when forecasting and purchasing spare parts
- dispose of spare parts that were not used in the last two year; and
- require the use of existing DLA inventory prior to purchasing the spare parts through General Atomics.

As a result, PM MAE officials undervalued inventory on the Army financial statements by more than [REDACTED] million; kept [REDACTED] million in obsolete spare parts; retained excess inventory, valued at [REDACTED] million; may pay [REDACTED] in additional monthly storage costs to maintain obsolete and excess spare parts and could save a total of [REDACTED] million in storage costs over the next five years; and may pay an additional [REDACTED] on future spare parts purchased from General Atomics rather than maximizing DLA inventory.

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (cont'd)

Also, contracting officers and Army officials did not:

- receive fair and reasonable prices for 32 of 37 non-statistically sampled spare parts, valued at [REDACTED] million, on the full rate production contract; and
- validate actual unit costs for [REDACTED] spare parts, valued at [REDACTED] million, purchased on the performance based logistics (PBL) contract.

This occurred because the contracting officers did not conduct an adequate cost or price analysis on spare parts. Additionally, contracting and PM MAE officials did not obtain actual unit costs paid for spare parts. As a result, Army officials potentially paid [REDACTED] million in excess of fair and reasonable prices on the full production contract and will potentially overpay [REDACTED] million on future spare parts purchased. In addition, contracting officers cannot transition the PBL contract to a fixed price contract because it did not obtain actual unit costs paid for spare parts.

Recommendation:

Recommendation A.1

We recommend that the Project Manager, Unmanned Aircraft System (PM UAS):

- a. Complete the actions necessary to include the Gray Eagle spare parts in an Army Accountable Property System of Record (APSR).

Action Taken or Planned: Concur with Comments

- a. PM UAS was already working toward APSR compliance prior to the initiation of the DoD IG audit.
- b. The Statement of Federal Financial Accounting Standards directs the Military Departments to ensure that it has all Government accountable property within an APSR no later than the end of FY17 to enable accurate financial statement reporting.
- c. The Army supply system which consists of the for Catalog, Order, and Logistics Tracking System (COLTS) and Logistics Modernization Program (LMP) systems is the method by which the enterprise supports Gray Eagle readiness. As discussed in the DoD IG draft report, the connection of COLTS to LMP will accomplish this requirement. COLTS and LMP end-to-end testing will begin in April 2016 with the objective of the test is to verify that all Class IX data can be passed seamlessly between the two databases.
- d. PM UAS implemented the Defense Property Accountability System (DPAS) in June 2015. This required inventory of all contractor managed end items and spares. This process provides additional oversight and control of all Government Furnished Equipment (GFE) to include Class II and VII end items.
- e. LMP and DPAS are the primary methods of reporting for PM UAS to the APSR.
- f. PM UAS is on track to complete implementation by the end of FY17.

Recommendation:

- b. Require that Product Manager-Medium Altitude Endurance (PdM MAE):
 - i. Review the obsolete spare parts and initiate disposal of any unneeded obsolete spare parts.

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (cont'd)

Action Planned or Taken: Concur with Comments

a. PdM MAE used the 2013 CBA to initiate the AWMWG and in Phase I self-identified [REDACTED] items that required disposal. These items were provide to the DOD IG and created this recommendation. Disposing of these parts with zero (0) demands over a 36 month period will reduce overall inventory by ~6%.

b. PdM MAE is working with Defense Contract Management Agency (DCMA) in San Diego, CA utilizing the Plant Clearance Automated Reutilization Screening System (PCARSS) process to dispose of non-repairable and obsolete items. The AWMWG goal is to eliminate all obsolete excess parts by 2018.

c. The AWMWG recommended that the prime contractor relocate the current warehouse storage to a new facility at no additional cost to the Government, resulting in a cost reduction of 30% per square foot. The prime contractor is relocating the warehouse storage to a smaller footprint from April through August 2016.

Recommendation:

ii. Use excess inventory at DoD fielded locations before purchasing additional spare parts from General Atomics on the performance-based logistics contract and production contracts and then conduct a cost benefit analysis to determine whether it should dispose of the excess spare parts or keep the excess spare parts for future use and take the appropriate action.

Action Taken or Planned: Concur with Comments

a. The Government directed the prime contractor via contracting officer letter to utilize all excess inventory before purchasing additional spare assets. The AWMWG continues to monitor usage rates and work closely with the prime contractor to ensure the correct spare parts quantities are procured and future fielding spares packages utilize stockage on hand. This is an active/on-going process implemented in conjunction with the PCARSS process.

b. During the six (6) month Bridge Contract May thru October 15, PdM MAE did not authorize the replenishment of Gray Eagle spare parts. Portions of these excess spare parts were utilized to support four (4) OCONUS deploy Gray Eagle locations and four (4) CONUS Gray Eagle locations flying over 16,200 flight hours. This significantly reduced excess parts all while maintained an operational readiness rate over 90%.

c. PdM MAE is in the process of replacing the One System Ground Control Station (OSGCS) with the Universal Ground Control Station (UGCS). The divesture of the OSGCS will decrease spare requirements based on increased reliability and system redesign. The One System Ground Control Station (OSGCS) product line will be phased out completely by the end of 2017. This will result in the reduction of over 4,395 line items (~30,000 parts) at an estimated value of \$106 million dollars.

Recommendation:

iii. Review the contract terms and determine if the contract should be modified to include a requirement for General Atomics to include inventory located at DoD fielded locations when forecasting spare parts for the performance-based logistics contract and review General Atomics' forecasting process to verify spare parts are being forecasted based on the actual parts used.

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (cont'd)

Action Taken or Planned: Concur with Comments

a. The Government will require in the FY17 Performance Base Logistics Contract that the prime contractor must account for all fielded Gray Eagle spare parts prior to purchasing additional spares. This will be included in follow on performance based logistics contracts as well.

b. Total asset visibility will be created due to government direction already provided and the full implementation of LMP. Government Item Managers, whose function it is to help manage stockage levels and fill requisitions based on demand analysis, will be brought on board to support the supply function. PM UAS is currently in the process of matrixing in four (4) Item Managers that will support this functional area. PdM MAE has 1 Item Manager on board with the remaining 3 to be within PdM MAE by 1stQTRFY17. The additional visibility gives the Item Managers the ability to cross level spare assets between all Gray Eagle fielded units prior to the purchase of additional spare parts. This oversight will ensure the prime contractor does not purchase excess parts. Additionally, the Item Managers will review the prime contractor forecasting processes to verify spare parts are forecasted based on actual spare parts usage.

Recommendation:

iv. Use existing Defense Logistics Agency (DLA) inventory, when possible, before purchasing the spare parts from General Atomics.

Action Taken or Planned: Concur with Comments

a. PM UAS is currently in the process of matrixing in four (4) Item Managers from Aviation and Missile Command (AMCOM) that will support this functional area. PdM MAE has 1 Item Manager currently within PdM MAE with the remaining 3 to be brought on by 1stQTRFY17. Item Managers will serve to help manage stockage levels and fill requisitions based on demand analysis to included parts procured through DLA. They will be an integral part of the AWMWG providing holistic spare parts management, to include DLA parts.

b. PM UAS is working to transition the supply function from the COLTS FSR to the Soldier utilizing the standard Army Aviation supply system providing access to the DLA inventory. The functionality will exist for the Soldiers to order directly from DLA by Nov 2016.

c. The Item Managers will be in place prior to award of the FY17 Performance Base Logistics contract which will occur in 1stQTRFY17.

Recommendation:

B.2. We recommend that the Project Manager, Unmanned Aircraft Systems, verify that the Catalog, Order, and Logistics Tracking System (COLTS) includes the Army's actual unit cost of the spare parts purchased.

Action Taken or Planned: Concur with Comment

a. PdM MAE is working with the contracting officer, ACC-RSA and the prime contractor to establish unit cost for Class IX parts for future Performance Based Logistics (PBL) contracts. In the FY17 PBL contract Request For Proposal (FRP), the contractor is being required to submit their actual spare parts

Assistant Secretary of the Army (Acquisition, Logistics, and Technology) (cont'd)

cost in the performance of prior year PBL efforts. This data will be reviewed as a starting point for verification of the COLTS spare parts unit prices.

Army Materiel Command

REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY MATERIEL COMMAND
4400 MARTIN ROAD
REDSTONE ARSENAL, AL 35898-5000

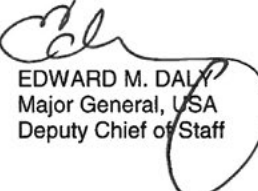
AMCIR

MEMORANDUM FOR Department of Defense Inspector General (DoDIG),
[REDACTED] Program Director, Acquisition, Parts, and Inventory,
4800 Mark Center Drive, Alexandria, VA 22350-1500

SUBJECT: Command Comments on DoDIG Draft Report: Army's Management of Gray
Eagle Spare Parts Needs Improvement, Project D2015-D000AT-0183

1. The U.S. Army Materiel Command (AMC) has reviewed the subject draft report and the response from the U.S. Army Contracting Command (ACC). AMC endorses the enclosed ACC response.
2. The AMC point of contact is [REDACTED].

Encl


EDWARD M. DALY
Major General, USA
Deputy Chief of Staff

Army Materiel Command (cont'd)

REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
U.S. ARMY CONTRACTING COMMAND
4505 MARTIN ROAD
REDSTONE ARSENAL, AL 35898-5000

04 MAR 2016


AMSCC-IR

MEMORANDUM FOR [REDACTED], Director, Internal Review and Audit
Compliance Office, Headquarters, U.S. Army Materiel Command, 4400 Martin Road,
Redstone Arsenal, AL 35898

SUBJECT: DODIG Report, Army's Management of Gray Eagle Spare Parts Needs
Improvement (Project No. D2015-D000AT-0183.000) (D1535) (3375)

1. DODIG Report, DoD Inspector General, 10 February 2016, subject: same as above.
2. The Army Contracting Command (ACC) provides the enclosed comments in response to the referenced document. HQ ACC request closure of Recommendation B.1.b.
3. The ACC POC is [REDACTED]

Encl


MARTIN A. ZYBURA
COL, FA
Chief of Staff

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Army Materiel Command (cont'd)



DEPARTMENT OF THE ARMY
ARMY CONTRACTING COMMAND - REDSTONE
BUILDING 5303 MARTIN ROAD
REDSTONE ARSENAL, ALABAMA 35898-5000

26 February 2016

CCAM-PS-AO

MEMORANDUM FOR [REDACTED], Internal Review and Audit Compliance Office,
U.S. Army Contracting Command, 4505 Martin Road, Redstone Arsenal, AL 35898-5000

SUBJECT: Response to February 10, 2016 Request for Comments on OIG Draft Audit
Report on "Army's Management of Gray Eagle Spare Parts Needs Improvement" (Project
No. D2015-D000AT-0183)

1. The Army Contracting Command-Redstone provides the subject enclosed response.
2. The subject response has been reviewed for the inclusion of For Official Use Only information and has been appropriately marked.
3. The point of contact for this action is [REDACTED].

Encl

REBECCA E. WEIRICK
Executive Director
Army Contracting Command-Redstone

Army Materiel Command (cont'd)

COMMAND COMMENTS

In Response to February 10, 2016 Request for Comments

On OIG Draft Audit Report,

"Army's Management of Gray Eagle Spare Parts Needs Improvement,"
February 10, 2016 (Project No. D2015-D000AT-0183)

Following, quoted from the audit report, are the OIG recommendations; and Army Contracting Command-Redstone's (ACC-RSA's) responses to the recommendations.

Recommendation B.1.a:

"We recommend the Executive Director, Army Contracting Command, Redstone Arsenal . . .

Verify contracting officers conduct an adequate fair and reasonable analysis for spare parts purchased on the full production contract as required by Federal Acquisition Regulation 15.402."

Command Comments: Concur.

ACC-RSA will verify the contracting officer conducts, as required by Federal Acquisition Regulation (FAR) 15.402, an adequate fair and reasonable analysis for spare parts purchased on the full production contract. This will be accomplished through the Business Clearance Process wherein at least two management levels with contracting authority above the Contracting Officer review the Price Negotiation Memorandum (PNM) prior to contract award.

In accordance with FAR 15.406-3, the PNM will document that the agreement reached is fair and reasonable, how that determination was reached, and indicate what information the negotiator relied upon for settlement.

For this contract award, the PNM will be reviewed by the ACC-RSA Unmanned Aircraft Systems (UAS) Chief of the Contracting Office, who is also the ACC-RSA UAS Directorate Director; and approved by the ACC-RSA Principal Assistant Responsible for Contracting, who is also the ACC-RSA Executive Director.

Attached is the ACC-RSA Acquisition Instruction which contains in Section 15 ACC-RSA policies and procedures, including review/approval thresholds, for the Business Clearance Process.

Award of the contract is currently expected by 30SEP16. Based on this award date, ACC-RSA will provide the approved PNM to the OIG by 31OCT16.

Army Materiel Command (cont'd)

Final Report Reference

Recommendation B.1.b:

"We recommend the Executive Director, Army Contracting Command, Redstone Arsenal . . .

Request actual unit spare-parts costs purchased on the Performance-Based Logistics contract for determining fair and reasonable prices on future contracts."

Command Comments: Concur.

Attached are two solicitations for future Gray Eagle contracts and amendment 0001 to each solicitation. The amendments request that the contractor provide actual unit costs for spare parts purchased on the Performance-Based Logistics contract as well as other contracts that are predecessors to the requirements being solicited.

Request for Closure: Based on the above response to Recommendation B.1.b, request the OIG close this portion of Recommendation B.1.

Recommendation B.1.c:

"We recommend the Executive Director, Army Contracting Command, Redstone Arsenal . . .

Assess and determine whether overpayments were made and implement available options to seek recovery, to include voluntary refunds in accordance with Defense Federal Acquisition Regulation Supplement 242.71 of the overpayments identified on the 32 of 37 sample parts."

Command Comments: Concur.

ACC-RSA will assess and determine whether overpayments were made and implement available options to seek recovery, to include voluntary refunds in accordance with Defense Federal Acquisition Regulation Supplement 242.71 of the overpayments identified on the 32 of 37 sample parts.

ACC-RSA will request that the OIG audit team provide data and calculations (in electronic form) adequate for ACC-RSA to duplicate the team's findings regarding overpayments. This will be the basis for our assessment and determination. (Note: ACC-RSA recognizes that the OIG may not be at liberty to disclose certain cost information provided by the contractor with restrictions during the course of the audit; ACC-RSA will pursue any such information directly from the contractor.)

ACC-RSA will also obtain a legal opinion identifying available options to seek recovery of such overpayments.

Revised

Army Materiel Command (cont'd)

At this time it is unknown to what extent ACC-RSA will be able to determine overpayments, what options are available to seek recovery of any overpayments identified and how long it will take to actually recover any such overpayments. However, ACC-RSA's goal is to initiate recovery (such as issuing a demand letter to the contractor) by 30SEP16.

Recommendation B.1.d:

"We recommend the Executive Director, Army Contracting Command, Redstone Arsenal . . .

Develop an action plan with defined milestones for the Performance-Based Logistics contract to transition to a fixed price contract for spare parts."

Command Comments: Concur.

ACC-RSA will develop an action plan with defined milestones for the Performance-Based Logistics contract to transition to a fixed price contract for spare parts.

The plan will be developed in conjunction with the negotiation and award of the contract and will be provided, along with the PNM (see Command Comments on Recommendation B.1.a), by 31OCT16.

Attachments:

ACC-RSA Acquisition Instruction
Two Solicitations and Two Amendments Thereto

Note: Neither the content of this document nor or its attachments have information that is either critical or exempt from release under the Freedom of Information Act.

Acronyms and Abbreviations

ACC-RSA	Army Contracting Command, Redstone Arsenal
APSR	Accountable Property System of Record
COLTS	Catalog, Order, and Logistics Tracking System
DCAA	Defense Contract Audit Agency
DCMA	Defense Contract Management Agency
DLA	Defense Logistics Agency
LMP	Logistics Modernization Program
NSN	National Stock Number
PBL	Performance-Based Logistics
PdM MAE	Product Manager–Medium Altitude Endurance
PM UAS	Project Manager Unmanned Aircraft System



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